

Jeremiah W. (Jay) Nixon
Governor



Mike Downing, CECD
Director

DIVISION OF ENERGY

Public Meeting Report #6 Energy Related Land Use

Missouri Comprehensive State Energy Plan

**Stakeholder Engagement
October 28, 2014
Sikeston, Missouri
Clinton Building Community Center**

BACKGROUND

Under Governor Jay Nixon's Executive Order 14-06, the Division of Energy will gather public input to identify the policies and practices that will meet Missouri's need for clean, affordable and abundant energy in the future.

This meeting represented the sixth of seven public meetings held around the State of Missouri to collect public input and feedback into the Comprehensive Statewide Energy Plan (the Plan).

The Plan will recommend policies that encourage efficient use of energy in all sectors of the economy; spur job creation and economic growth; and promote development, security and affordability of diverse energy sources.

The meeting topics centered on Energy Related Land Use. Steering Committee members were provided with a list of questions prior to the meeting to help guide the discussion. The objectives of the meeting included:

- 1) To convene individuals who were appointed to the Plan's Steering Committee and develop a culture for dialogue;
- 2) Discuss opportunities and issues around the topics of Energy Related Land Use;
- 3) To introduce the background and purpose of the Plan to the public; and
- 4) To gather public input and comments around different energy topics.

AGENDA

The meeting was structured in four parts:

- 1) Introduction and welcoming remarks from Lewis Mills, Director of the Division of Energy.
- 2) Short presentations from experts.
- 3) Discussion among Steering Committee members.
- 4) Public comment period.

Agenda Details

1:00 PM	Welcome and Introductions Lewis Mills, Director, Division of Energy Ed Dust, Director of Economic Development for the City of Sikeston
1:10 PM	Missouri's Comprehensive State Energy Plan Lewis Mills, Director, Division of Energy
1:20 PM	Land Use Issues for Solar and Landfill Gas Generation Floyd Gilzow, Chief Operating Officer and Director of Member Relations and Public Affairs for the Missouri Public Utility Alliance
1:35 PM	Energy Related Land Use Terry Smith, Facility Manager for Hampton Alternative Energy Products
1:50 PM	Steering Committee Discussion Topic: Energy Related Land Use Facilitator: Bennett J. Johnson, III, Inova Energy Group team
3:30 PM	Break
3:40 PM	Public Comment Period Facilitator: Bennett J. Johnson, III, Inova Energy Group team
5:00 PM	Adjourn

ATTENDANCE

Steering Committee Members

First Name	Last Name	Affiliation
Elizabeth	Bax	Hawthorn Foundation
Mike	Blank	Peabody Energy
Joan	Bray	Consumers Council of Missouri
Josh	Campbell	Missouri Energy Initiative
Eric	Crawford	Missouri Department of Natural Resources
Jim	Curran	Electrical Connection
Steve	Damer	Leggett & Platt, Inc.
Matt	Forck	Ameren Missouri
Elizabeth	Dumm	Empire District Electric Company
Floyd	Gilzow	Missouri Public Utility Alliance
John	Hickey	Sierra Club- Missouri Chapter
Mark	Hill	Missouri Office of Administration
Tracy	Howe-Koch	Missouri Interfaith Power & Light
Frank	Kartmann	Missouri American Water Company
Lisa	Lemaster	Missouri Department of Transportation
Laura	Lesniewski	American Institute of Architects
Marc	Lopata	Azimuth Energy
David	Shanks	The Boeing Company
Terry	Smith	Hampton Alternative Energy Products
Rebecca	Stanfield	Natural Resources Defense Council
Brent	Stewart	Missouri Association of Electric Cooperatives
Kevin	Van de Ven	Nucor Corp.
Ron	Walker	State Emergency Management Agency
Loyd	Wilson	Missouri Department of Agriculture

Public Attendance

A total of 14 members of the public attended the meeting.

MEETING PROGRESSION

Welcoming Remarks

Lewis Mills, Director of the Division of Energy for the Department of Economic Development, welcomed Steering Committee members and the public to the meeting, presented the agenda for the meeting and invited comments from the public during the public comment period.

Presentations

Two speakers were invited to present to the Steering Committee and the public on topics related to energy land use. The PowerPoint slides and video of presentations made at the meeting are available for viewing at <http://energy.mo.gov/energy/about/comprehensive-state-energy-plan>.

Title of Presentation: Land Use Issues for Solar and Landfill Gas Generation

Speaker: Floyd Gilzow, Chief Operating Officer and Director of Member Relations and Public Affairs for the Missouri Public Utility Alliance

Summary: Mr. Gilzow described planned and completed solar and landfill gas projects that different municipal utilities in Missouri have undertaken. In addition, the speaker described different configurations of solar energy projects and the advantages and challenges of each.

Title of Presentation: Hampton Feed Lot, Inc. and Hampton Alternative Energy Products, LLC

Speaker: Terry Smith, Facility Manager for Hampton Alternative Energy Products

Summary: Ms. Smith described operations and biomass based products from the company Hampton Alternative Energy Products (HAEP), which is the first in Missouri to develop an anaerobic digester system for animal waste. This includes animal waste being used as fertilizer and for generation of electricity. The presentation described the building of HAEP facilities and some of the challenges associated with developing these products.

Steering Committee Discussion

Bennett J. Johnson, III, with the Inova Energy Group team, facilitated the Steering Committee discussion around the topics of energy related land use. A synopsis of comments made by the Steering Committee members follows:

During the discussion period, Steering Committee members provided their thoughts based upon these questions and other prompts from the facilitator. A summary of comments made by Steering Committee members follows:

- Discussion of building codes: Missouri is one of six states that does not have statewide building codes. Even some cities and counties with codes are considerably out of date. Recognizing that state and local governments require fire, electric and plumbing codes for purposes of protecting life and safety, perhaps the State could develop an energy code to follow that would benefit health, safety and efficiency. For rural communities where the population/building density may not be able to support the cost associated with architectural reviews, code enforcement and building inspection staff, could communities share

resources and personnel? Ideas were shared around using utility demand-side management programs to train and finance building inspectors as well as the potential for municipal utilities to take a leadership role since the authority for the adoption of codes is at the local level. In addition, members discussed the possibility of identifying and prioritizing counties and cities with the largest number of new construction projects for building code implementation.

- Clarification of how municipal utilities recover lost revenue through fees.
- Discussion of coal ash storage and different ways of storing on-site (dry and wet) and reusing coal ash as construction material for roads and other projects. Only about half of this waste product is diverted in this manner, so increasing the demand or identifying additional beneficial uses for coal ash would result in less on-site storage. In addition, the discussion talked about the logistics of transporting coal ash to where the product is needed. Finally, thoughts were shared around the impacts of coal ash to the environment and particularly around calculating costs of dealing with ash ponds at time of decommissioning of power plants.
- Conversation around net metering rules and residential customers' limits on the size of solar systems and the value of solar. Utilities make investments in transmission and distribution systems and if others are generating electricity and putting it into the grid, they could be basically in competition with the grid system. Other states, such as Minnesota, are looking at the best way of valuing solar and distributing the costs of maintaining the grid considering users that install solar panels may either go off the grid or put energy back into the grid.
- A presenter described the amount of acreage required for utility scale solar projects and explained that solar farms must be sited near transmission to increase the project's efficiency. While land is easier to acquire in more rural areas, for suburban and urban applications, it may be more sensible for utilities to install PV panels on willing customers' rooftops. This not only increases the project's efficiency by siting the generation source closest to where it is being consumed but it also satisfies customer requests for renewable generation.
- Conversation on issues that residents who want to install solar photovoltaic panels at their homes might face in terms of limitations with their homeowners associations.
- Thoughts around properly aligning incentives to encourage energy efficiency with customers while allowing utilities to generate revenue and recover fixed costs.
- Concerns were expressed about a lack of urban planning. City sprawl results in increased infrastructure and transportation costs. Thoughts around transit-oriented development and the need to educate the public around smart development and the need for incentives were shared.
- Discussion of biodiesel production using feed and non-feed crops and the benefits and disadvantages of each. The conversation also addressed cellulosic ethanol for biodiesel production. Insights were shared into the production of this fuel, and the possibility of using by-products (dried grains from food crops) as feed value for cattle. Crop residues could also be harvested and developed into products that can be co-fired with coal for electric generation.

Public Comment Period

During the public comment period, a total of 6 individuals submitted verbal testimony to the Steering Committee and the Department of Economic Development. All comments were recorded and included in this report as Attachment 1.

ATTACHMENT 1 - Public Comments

October 28, 2014

Sikeston, Missouri, Clinton Building Community Center

The comments provided in this document do not represent a verbatim transcription of the comments received verbally and may incorporate some close paraphrasing on behalf of the record-keeper. Comments are not shown in the order in which they were received.

First Name	Last Name	Affiliation	Comment
Frances	Babb		I had an opportunity to talk with Director Lewis Mills in Kansas City. I asked what kind of solar laws do you have that inhibit solar. He said basically none. Now, we have a situation where homeowners associations as well as municipalities are, in essence, in cahoots with each other. You have to do it over here and the city will say the exact opposite. In order to have solar you have to sue one entity. They are limiting roof space, limiting licensing. Compliments of the Sierra Club, I have brought a solar panel to ask you which solar panel looks the ugliest. A solar panel looks like a solar panel. There are so many people who are fighting their homeowners associations and cities and are dealing with unreasonable restrictions. You should be allowed to have cost-effective rooftop solar without having to sue somebody first. Some cities have unreasonable building codes. We need statewide codes.
Teresa	Barnes	Resident – Missouri Coalition for the Environment volunteer	I lived in Colorado for 10 years. I bought a home in Missouri recently. I brought a picture of my house. I am a pulmonary doctor and work with pulmonary fibrosis. I am here today with Frances Babb because of her fight with solar. She has won against the town of Clarkson Valley. My husband and I bought this house. I am a former television reporter and editor of a major medical journal. We chose this house in this neighborhood because of the schools. We may put the house up for sale in Oakville. The homeowners association has filed a lawsuit against us because of solar panels on our home. Ameren offered rebates so it was worth it. We looked at permits. Solar was not limited in the State of Missouri. After weeks of negotiations, they wanted us to move panels and move them to our backyard which only has 3 hours of sunlight a day. This shouldn't be the way of life in Missouri or anywhere. Fire stations and schools have solar. Don't drive a car, it could blow up your house. It seems to me that what is happening is an attack on people in Missouri. State law should trump homeowners associations. Solar is clean energy for the environment and clean for the people.

First Name	Last Name	Affiliation	Comment
Louise	Belt		I am from Wildwood, Missouri. In 1998 we built an all-electric 5000 sq. ft. house. I was a member of solar. Our electric bills were around \$300/month. The roof was too shaded and back in 1998 when you put in solar they cost too much. We didn't want to cut down trees because they provided trees. We cut down trees so that the sunlight would light up our house. We got in trouble from the town about that and also from our neighbors. The town realized that the permit that they got wasn't enough so they decided to put in another permit in Wildwood. Which side of your house is your solar going to be on? Does it matter? You don't want a homeowners association or code inspector to tell you where to put it. You have to realize cost effective statewide codes are important. We need to encourage solar, biomass, wind. I grow family vegetables in my garden, which is east of the Labadie power plant. There is no reason that an electric energy company has to have a monopoly. Evidently food is cheaper than electric. Let solar, wind, etc. produce electricity. Homeowners associations should not be punishing people who just want to get a solar source of energy.
Patrick	Casey		I am here from O'Fallon, Missouri and am a retired Air Force officer, have traveled the country and the world. Out in Tucson, one of the Department of Defense facilities uses solar panels to power the entire base. All buildings have solar panels. I haven't really thought of panels until I saw what the Air Force was doing. We could use the Ameren rebate. We could put solar panels on our home. Two members of the homeowners association board are all about aesthetics. As long as you put them on the back of your home we are all for it. Unfortunately, the back won't get me the 80% rebate that Ameren offered. I have been fighting the homeowners association since then. The bylaws were written in 1999. Now there is a policy that they are trying to put forth. It tells you that solar panels must be lined up perfectly, can only go so far horizontally, vertically, can't be staggered, prefer on the back of your home because we don't like the way they look. We have the right to harness solar power on our homes and that's what we are doing. The president of the homeowners association sits on the O'Fallon committee. The city gave final approval for my solar panels and then I received a letter saying that they think they needed to go back to look at the panel. And they concluded that my panels must be moved or I was subject to a fee or incarceration. So an installer came out and moved them 4 inches. Finally a week ago, the city came back out and I got a final inspection. They said that just because our inspectors are incompetent it doesn't mean we have to back the final report.
Carolyn	Johnson		I worked as a geologist for numerous years in Colorado. I was determined to do something with renewable energy. In building my home, I added a ground source heat pump. There is no encouragement with incentives in Missouri to do that. I have Ameren as my utility company. I have solar panels on my garage. I was fortunate to be able to take the money. A lot of local people worked on the project. A lot of good jobs there. Ameren was a nightmare to deal with. I worked very hard on the 2008 Proposition C referendum. I worked with the steering committee. My panels were put on in 2011. This was not new to the St. Louis office. I was preapproved for the rebate, but Ameren lost the rebate paperwork three times. They sent the rebate check to the wrong address two times and in the meantime they sued to try and overturn the program. I think that people need an ombudsman to help with the solar rebate process--there is a hang up

First Name	Last Name	Affiliation	Comment
			<p>somewhere. The second thing I would say is that there is no requirement for rural electric cooperatives (REAs). REAs tend to be smaller. We need something more comprehensive. There are other ways to finance renewable options. When you put up money for these kinds of things you could use loan programs, add to the mortgage, or put it in with a mortgage thing that people can pay off with savings. Mr. Mills was public counsel and agency was under funded for what it needed to do. There needs to be some adequate money put into it. One thing that needs more work on is transportation. The last thing I would like to say is that I have been to a number of public hearings which people have not been able to attend because they are held during business hours: you do public meetings for the benefit of the people not the steering committee. Get more into the people, not paid executives from large companies.</p>
Drew	Young	Fuel Conversion Solutions	<p>First off, thanks to everyone on the panel; it was very informative. We are in the business of converting vehicles to run on natural gas and propane. We were incorporated in 2010. Of the 420 conversions I have done so far, only 22 of them were done for Missouri customers. Recently the American Council for an Energy Efficient Economy rankings were published and the State of Missouri dropped from 43rd place in 2012 to 44th place in 2013. We have neighboring states like Illinois that are placed at number 11, Arkansas number 31, and Kentucky at 33. The state of Missouri is getting run over by neighboring states, taking with them revenues, registration, taxes and fuel. I am here to strongly encourage that Missouri keep up with neighboring states. Funds need to be appropriated for the alternative fuel infrastructure tax credit (Senate Bill 730).</p>